



Gulf of Mexico Harmful Algal Bloom Bulletin

1 September 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: August 29, 2005

Conditions: A harmful algal bloom has been identified from northern Pinellas County to northern Lee County. From northern Pinellas to northern Sarasota Counties, patchy moderate to high impacts are possible through Friday followed by very low to low impacts on Saturday and Sunday. In Charlotte and Lee Counties, patchy none to very low impacts are possible through Sunday. Dead fish have been reported in the last few days. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide. Discolored water is possible.

Analysis: Hurricane Katrina obscures imagery analysis of blooms located in Taylor, Pasco counties, and offshore of Pinellas to northern Collier County. Resuspension event indicates slightly elevated chlorophyll band along the coast, however, dispersion was not uniform due to LA landfall location and intensity. Consistently higher chlorophyll levels ($6\text{--}20\ \mu\text{g/l}$) extend 70 miles offshore of Sarasota (hot spot: $19\ \mu\text{g/l}$, $26^\circ 55'\text{N}$, $82^\circ 55'\text{W}$) compared to generally lower chlorophyll levels southward. Recommend offshore sampling. Imagery indicates transport of bloom up to 17 miles offshore in southern section. Samples indicate southern boundary of bloom may be 25 miles southwest of Fort Myers, at the Lee - Collier county line (Aug 25, FWRI).

Samples confirm bloom persists from Pinellas to Manatee counties (Aug 29-31, FWRI). Samples confirm persistence of bloom offshore of Taylor county and lingering cell concentrations at Pasco-Hernando county line (Aug 30; FWRI). Light, variable winds will likely maintain bloom location.

An eddy has spun off from the chlorophyll band, may contain *K. brevis*, and is located southwest of the Keys ($24^\circ 13'\text{N}$, $84^\circ 6'\text{W}$). Will

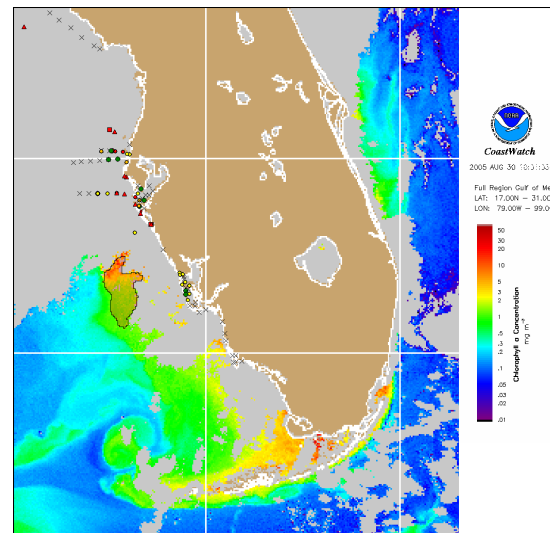
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

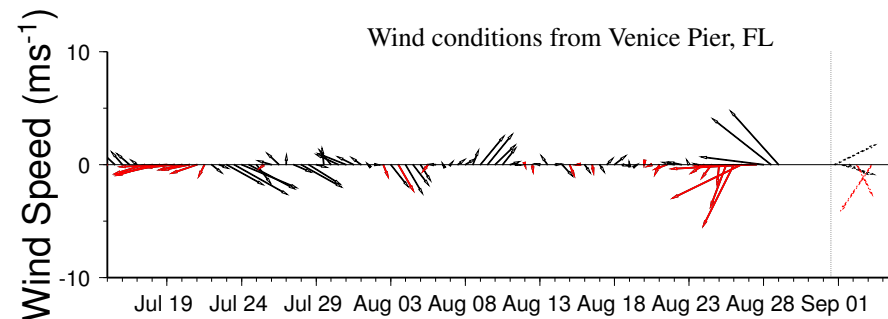
attempt to monitor transport.

Non-harmful blooms persist off of Marco Beach, Collier County (Aug 29), and in Citrus County (Aug 25; FWRI). Reports of discolored water are likely.

~Fenstermacher, Keller



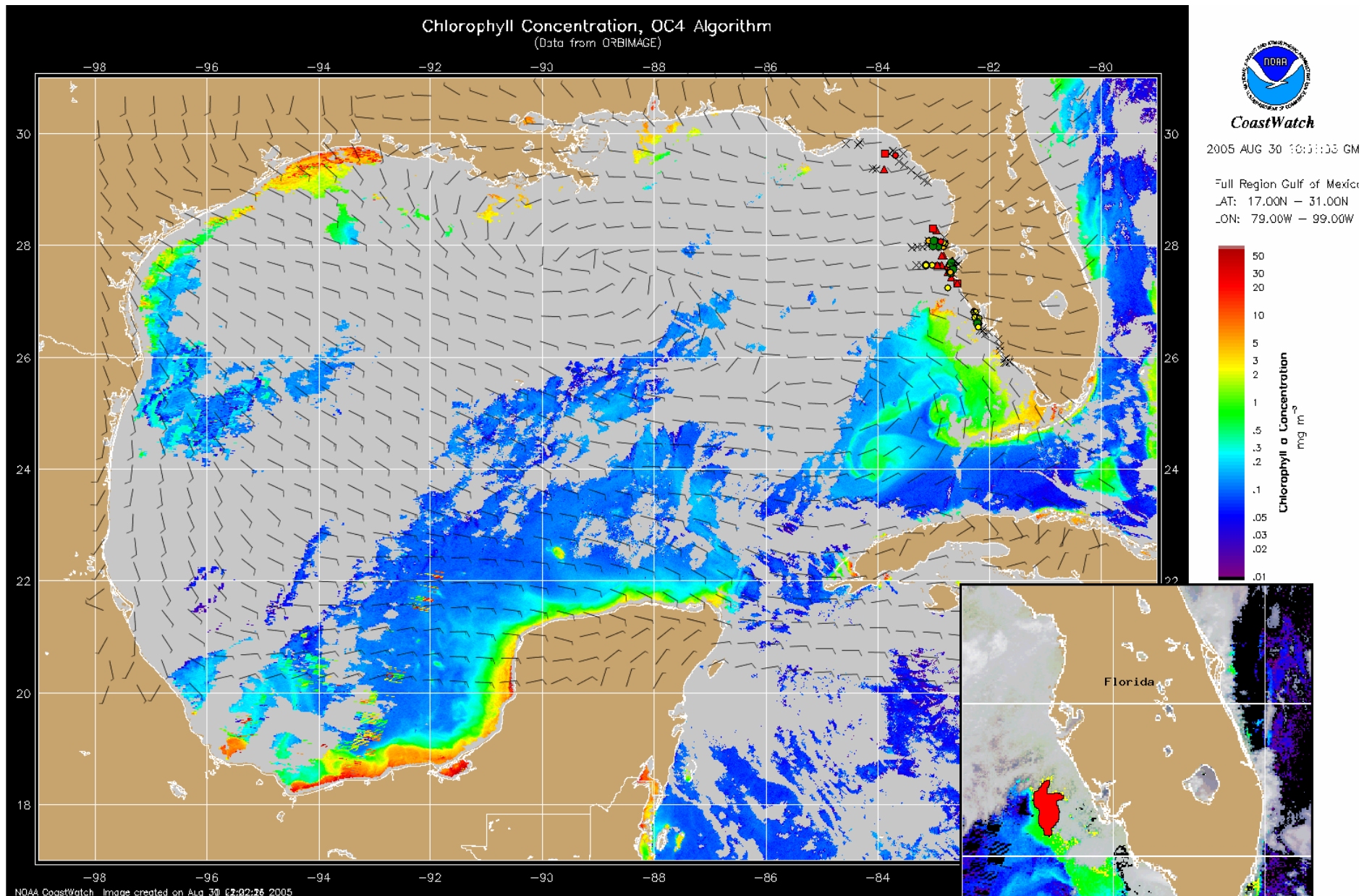
Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from August 25, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

As a result of Hurricane Katrina, the National Data Buoy Center (NDBC) Buoy, C-MAN, Ship, and Drifting Buoy Observations are unavailable.

SW Florida: Light southwesterlies to westerlies today and tomorrow clocking around to northwesterlies and northeasterlies on Saturday and Sunday (2-5 m/s; 4-10 knots).



Chlorophyll concentration from satellite and forecast winds for September 2, 2005 06Z with cell concentration sampling data from August 25, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)

